5



ABSTRACT OF THE DISCLOSURE

09724025

Methods and systems are described for predicting the likely causes of service outages using only time information, and for predicting and the likely costs of service outages. The likely causes are found by defining a narrow likely cause window around an outage based on service quality and/or service usage data, and correlating service events to the likely cause window in the time domain to find a probability distribution for the events. The likely costs are found by measuring usage loss and duration for a given point during an outage and using cost component functions of the time and usage to extrapolate over the outage. These cause and cost predictions supply service administrators with tools for making more informed decisions about allocation of resources in preventing and correcting service outages.